

# McGraw-Hill Dictionary of Scientific and Technical Terms Fifth Edition

Sybil P. Parker  
Editor in Chief

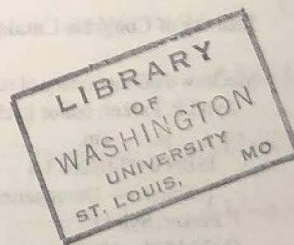


EXHIBIT Z

McGraw-Hill, Inc.  
New York San Francisco Washington, D.C.  
Auckland Bogotá Caracas Lisbon London Madrid Mexico City Milan  
Montreal New Delhi San Juan Singapore Sydney Tokyo Toronto



On the cover: Photomicrograph of crystals of vitamin B<sub>1</sub>.  
(Dennis Kunkel, University of Hawaii)

Included in this Dictionary are definitions which have been published previously in the following works: P. B. Jordain, *Condensed Computer Encyclopedia*, Copyright © 1969 by McGraw-Hill, Inc. All rights reserved. J. Markus, *Electronics and Nucleonics Dictionary*, 4th ed., Copyright © 1960, 1966, 1978 by McGraw-Hill, Inc. All rights reserved. J. Quick, *Artists' and Illustrators' Encyclopedia*, Copyright © 1969 by McGraw-Hill, Inc. All rights reserved. *Blakiston's Gould Medical Dictionary*, 3d ed., Copyright © 1956, 1972 by McGraw-Hill, Inc. All rights reserved. T. Baumeister and L. S. Marks, eds., *Standard Handbook for Mechanical Engineers*, 7th ed., Copyright © 1958, 1967 by McGraw-Hill, Inc. All rights reserved.

In addition, material has been drawn from the following references: R. E. Huschke, *Glossary of Meteorology*, American Meteorological Society, 1959; *U.S. Air Force Glossary of Standardized Terms*, AF Manual 11-1, vol. 1, 1972; *Communications-Electronics Terminology*, AF Manual 11-1, vol. 3, 1970; W. H. Allen, ed., *Dictionary of Technical Terms for Aerospace Use*, 1st ed., National Aeronautics and Space Administration, 1965; J. M. Gilliland, *Solar-Terrestrial Physics: A Glossary of Terms and Abbreviations*, Royal Aircraft Establishment Technical Report 67158, 1967; *Glossary of Air Traffic Control Terms*, Federal Aviation Agency; *A Glossary of Range Terminology*, White Sands Missile Range, New Mexico, National Bureau of Standards, AD 467-424; *A DOD Glossary of Mapping, Charting and Geodetic Terms*, 1st ed., Department of Defense, 1967; P. W. Thrush, comp. and ed., *A Dictionary of Mining, Mineral, and Related Terms*, Bureau of Mines, 1968; *Nuclear Terms: A Glossary*, 2d ed., Atomic Energy Commission; F. Casey, ed., *Compilation of Terms in Information Sciences Technology*, Federal Council for Science and Technology, 1970; *Glossary of Stinfo Terminology*, Office of Aerospace Research, U.S. Air Force, 1963; *Naval Dictionary of Electronic, Technical, and Imperative Terms*, Bureau of Naval Personnel, 1962; *ADP Glossary*, Department of the Navy, NAVSO P-3097.

## McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS, Fifth Edition

Copyright © 1994, 1989, 1984, 1978, 1976, 1974 by McGraw-Hill, Inc. All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

1 2 3 4 5 6 7 8 9 0 DOW/DOW 9 9 8 7 6 5 4 3

ISBN 0-07-042333-4

### Library of Congress Cataloging-in-Publication Data

McGraw-Hill dictionary of scientific and technical terms /  
Sybil P. Parker, editor in chief.—5th ed.

p. cm.

ISBN 0-07-042333-4

1. Science—Dictionaries. 2. Technology—Dictionaries.

I. Parker, Sybil P.

Q123.M34 1993

503—dc20

93-34772

CIP

### INTERNATIONAL EDITION

Copyright © 1994. Exclusive rights by McGraw-Hill, Inc. for manufacture and export. This book cannot be re-exported from the country to which it is consigned by McGraw-Hill. The International Edition is not available in North America.

When ordering this title, use ISBN 0-07-113584-7.



**mass transport** [FL MECH] 1. Carrying of loose materials in a moving medium such as water or air. 2. The movement of fluid, especially water, from one place to another. { 'mas 'tranz,pōrt }

**mass units** [MECH] Units of measurement having to do with masses of materials, such as pounds or grams. { 'mas ,yü·nəts }

**mass velocity** [FL MECH] The weight flow rate of a fluid divided by the cross-sectional area of the enclosing chamber or conduit; for example, lb/(h·ft<sup>2</sup>). { 'mas və,läs·əd·ē }

**mass wasting** [GEOL] Dislodgement and downslope transport of loose rock and soil material under the direct influence of gravitational body stresses. { 'mas ,wāst·ɪŋ }

**mast** [ENG] 1. A vertical metal pole serving as an antenna or antenna support. 2. A slender vertical pole which must be held in position by guy lines. 3. A drill, derrick, or tripod mounted on a drill unit, which can be raised to operating position by mechanical means. 4. A single pole, used as a drill derrick, supported in its upright or operating position by guys. [MECH ENG] A support member on certain industrial trucks, such as a forklift, that provides guideways for the vertical movement of the carriage. [NAV ARCH] A long wooden or metal pole or spar, usually vertical, on the deck or keel of a ship, to support other spars which in turn support or are attached to sails, as well as derricks. { mast }

**mast-, masto-** [ANAT] A combining form denoting breast; denoting mastoid. { mast,'mas·dō }

**Mastacembeloidei** [VERT ZOO] The spiny eels, a suborder of perciform fishes that are eellike in shape and have the pectoral girdle suspended from the vertebral column. { ,mas·tə,sem·bə'lōid·ē,ī }

**mastalgia** [MED] Pain in the breast. { ma'stal·jə }

**mastatrophy** [MED] Atrophy of the breast. { mast'a·trə·fē }

**mastax** [INV ZOO] The muscular pharynx in rotifers. { 'ma,staks }